#### **REMARKS**

Claims 35-65 are presented for examination, claims 1-34 and 66-114 having been withdrawn from consideration as being directed to a non-elected invention.

New claims 115-119 are similar to the respective independent claims elected for prosecution.

#### **INTERFERENCE**

Applicants attach hereto a chart demonstrating correspondence between the application claims 35-65 and those of various patents. A separate chart listing Claims 66-114 has also been provided.

### RESTRICTION REQUIREMENT

New claim 120 is believed to link claim 66 and 55, and clearly demonstrates the close correspondence of these inventions.

New claim 121 is believed to link claim 92 and 47, and clearly demonstrates the close correspondence of these inventions.

New claim 122 is believed to link claim 113 and 55, and clearly demonstrates the close correspondence of these inventions.

It is therefore respectfully submitted that, with respect to claims 66-100 and 113-114, that the restriction requirement be traversed and otherwise withdrawn, as the respective inventions are linked through proper linking claims showing the correspondence of various claim terms. It is believed that the compelling state interest in resolving interference issues, and issuing only one patent for an inventive concept, compels consolidated proceedings including the present application, US 5,724,567, 5,758,257, 5,754,939, 5,798,785 and 6,136,316.

CLAIM REJECTIONS - 35 U.S.C. § 102

3459-11 - 37 - March 18, 2004

Claims 35-38, 50-51, 55-56, 58 and 59 are rejected under 35 U.S.C. § 102(a) as allegedly being "clearly" anticipated by Hey, U.S. Patent Nos. 4,996,642 and 4,870,579.

The Hey references relate to a system which seeks to relate users to other users by inferred common likes. Therefore, while a "persistent user-specific profile," or its analogue, is created and stored, there is no need for, or disclosure of, any storage of "content records". That is, all the system needs to store, or indeed is disclosed as storing, is an <u>identification</u> of the content. Likewise, since these "content records" are not themselves stored by the system according to Hey, they are neither accessed nor presented. The system described by Hey provides no enabling teaching, nor suggestion, that the content itself (e.g., content records) should be delivered within the same system as the recommendation relating thereto.

Thus, with respect to claim 35, Hey specifically fails to provide:

means for storing a plurality of content records;

means for accessing the content records;

means for presenting to the user the related content records;

With respect to claim 40, Hey fails to provide:
storing a plurality of content records;
receiving a user request for content records;
presenting to the user the related content records.

With respect to claims 47, 55 and 58, Hey fails to automatically generate the user-specific profile, since the Hey system provides a recommendation only, and not access to the objects themselves, and therefore does not have the necessary information to automatically generate the user-specific profile based on access history.

For example, it is clear that the content records of claim 35 cannot be the rating information presented by the system according to Hey, since the user rates the movie, not the movie recommender system. Thus, the Examiner's rejection is inconsistent with the claims, and must fail.

3459-11 - 38 - March 18, 2004

## CLAIM REJECTIONS - 35 U.S.C. § 103

The Examiner also rejects claims 49, 52-54, 57 and 60-65 as being obvious over 35 U.S.C. § 103 over Hey '579 or Hey '642. As above, the system according to Hey fails to teach or suggest the storage or presentation of content records, or automatic updating of user profiles based on access, and therefore the references are believed to be overcome.

It is noted that, the Hashimoto references, like the Hey references, do not teach or suggest a system for storage or presentation of content records, or the automatic updating of user profiles based on user access.

It is therefore respectfully submitted that the present claims are allowable, and an interference declared.

Respectfully submitted,

By Steven M. Hoffberg

Reg. No. 33,511

MILDE & HOFFBERG, LLP 10 Bank Street - Suite 460 White Plains, NY 10606 (914) 949-3100

t hereby certify that this correspondence is being deposited with the United States Postal Services as first class mail in an envelope addressed to: Commissioner of Patents and Traderparks, Washington, D.C. 20231 pn 3/19/09

Βv

Date

# CLAIM CORRESPONDENCE CHART NON-ELECTED CLAIMS

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
66. A system, comprising:	Generic	5,798,785, Claim 1
means for receiving subscriber specific data;		
means for receiving program control information; and		
program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using the user subscriber specific information and the program control information.	program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	
67. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the set top terminal comprising:	1. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the set top terminal comprising:	5,798,785, Claim 1
said subscriber specific data receiving means being means for gathering subscriber specific data to be used in selecting programs;	a means for gathering the subscriber specific data to be used in selecting programs;	5,798,785, Claim 1
means, connected to the gathering means, for storing the subscriber specific data;	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 1
said program control information receiving means being means for receiving the program control information containing the program description data;	means for receiving the program control information containing the program description data;	5,798,785, Claim 1
said program selection means, being operably connected to the storing means and the means for receiving program control information, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	5,798,785, Claim 1

3459-11 -1-

APPLICATION CLAIM	PATENT CLAIM	CLAIM
		NO
a processor, wherein the subscriber	a processor, wherein the subscriber	5,798,785,
programming preferences are generated	programming preferences are generated	Claim 1
from the subscriber specific data; and	from the subscriber specific data; and	
means, operably connected to the program	means, operably connected to the	5,798,785,
selection means, for suggesting the	program selection means, for suggesting	Claim 1
selected programs to the subscriber.	the selected programs to the subscriber.	
		5,798,785,
		Claim 1
68. The system of claim 67, wherein:		
the set top terminal receives program	3. The apparatus of claim 1 wherein the	5,798,785,
signals and the program selection means	program selection means resides within a	Claim 3
resides within a set top terminal;	set top terminal.	
the set top terminal receives menu details	4. The set top terminal of claim 1	5,798,785,
from the television program delivery	wherein the set top terminal receives	Claim 4
system, a display is used, and wherein the	menu details from the television program	
means for gathering subscriber specific	delivery system, a display is used, and	
data comprises:	wherein the means for gathering	
1	subscriber specific data comprises:	
a memory device for storing received	a memory device for storing received	5,798,785,
menu details,	menu details;	Claim 4
the stored menu details include a cursor	5. The set top terminal of claim 4	5,798,785,
overlay, the means for generating menu	wherein the stored menu details include a	Claim 5
screens comprises a means for generating	cursor overlay, the means for generating	
the cursor overlay, the generated menu	menu screens comprises a means for	
screens are displayed on the display, and	generating the cursor overlay, the	
wherein the subscriber interface means	generated menu screens are displayed on	
comprises a means for moving the	the display, and wherein the subscriber	
generated cursor overlay on the displayed	interface means comprises a means for	
menu screens;	moving the generated cursor overlay on	
mond servens,	the displayed menu screens.	
a means, connected to the memory device,		5,798,785,
for generating menu screens by	device, for generating menu screens by	Claim 4
integrating the program control	integrating the program control	
information with the stored menu details;	information with the stored menu details;	
a means, connected to the generating	a means, connected to the generating	5,798,785,
means, for eliciting subscriber responses	means, for eliciting subscriber responses	Claim 4
using the generated menu screens;	using the generated menu screens; and	
a subscriber interface means for entering	a subscriber interface means for entering	5,798,785,
subscriber responses;	subscriber responses.	Claim 4
the set top terminal further comprising a	6. The set top terminal of claim 1	5,798,785,
means for generating a signal identifying	wherein a display is used and wherein the	Claim 6
a selected program's location on the	set top terminal receives program signals,	
received program signal.	the set top terminal further comprising a	
received program signar.	means for generating a signal identifying	
	means for generating a signar identitying	L

3459-11 - 2 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
	a selected program's location on the received program signal.	
69. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal receives menu details from the television program delivery system, the set top terminal comprising:	7. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal receives menu details from the television program delivery system, the set top terminal comprising:	5,798,785, Claim 7
said subscriber specific receiving means being means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs, wherein the means for gathering subscriber specific data comprises:	a means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs, wherein the means for gathering subscriber specific data comprises:	5,798,785, Claim 7
a first means for storing received menu	a first means for storing received menu	5,798,785,
details;	details; a means for generating menu screens by	Claim 7 5,798,785,
a means for generating menu screens by integrating the program control information with the stored menu details;	integrating the program control information with the stored menu details;	Claim 7
a display, connected to the generating means, wherein menu screens to elicit subscriber responses are displayed; and	a display, connected to the generating means, wherein menu screens to elicit subscriber responses are displayed; and	5,798,785, Claim 7
a subscriber interface means for entering subscriber responses to displayed menu screens;	a subscriber interface means for entering subscriber responses to displayed menu screens;	5,798,785, Claim 7
a second means, connected to the gathering means, for storing the subscriber specific data;	a second means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 7
said receiving means being means for receiving the program control information comprising program description data;	a means for receiving the program control information comprising program description data;	5,798,785, Claim 7
said program selection means being operably connected to the second storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program	a program selection means, operably connected to the second storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program	5,798,785, Claim 7

3459-11 - 3 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
control information whereby the selected programs correspond to the subscriber's programming preferences; and	control information whereby the selected programs correspond to the subscriber's programming preferences; and	
wherein the display is used to suggest the selected programs to the subscriber.	wherein the display is used to suggest the selected programs to the subscriber.	5,798,785, Claim 7
70. The set top terminal of claim 69, wherein the stored menu details include a cursor overlay and the means for generating menu screens comprises a means for generating the cursor overlay, and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	8. The set top terminal of claim 7 wherein the stored menu details include a cursor overlay and the means for generating menu screens comprises a means for generating the cursor overlay, and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	5,798,785, Claim 8
71. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, the set top terminal comprising:	9. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, the set top terminal comprising:	5,798,785, Claim 9
said subscriber specific data receiving means being means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs;	a means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs;	5,798,785, Claim 9
means, connected to the gathering means, for storing the subscriber specific data;	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 9
said receiving means being means for receiving the program control information comprising program description data;	a means for receiving the program control information comprising program description data;	5,798,785, Claim 9
said program selection means being operably connected to the storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program control information whereby the selected programs correspond to the subscriber's	a program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program control information whereby the selected programs correspond to the subscriber's	5,798,785, Claim 9

3459-11 - 4 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
programming preferences, wherein the program selection means comprises:	programming preferences, wherein the program selection means comprises:	
a means for matching the subscriber specific data to a program described by the program control information; and	a means for matching the subscriber specific data to a program described by the program control information; and	5,798,785, Claim 9
wherein the set top terminal further comprises a means for tuning to the matched program; and	wherein the set top terminal further comprises a means for tuning to the matched program; and	5,798,785, Claim 9
a means, operably connected to the program selection means, for displaying for suggesting the selected programs to the subscriber.	a means, operably connected to the program selection means, for displaying for suggestion the selected programs to the subscriber.	5,798,785, Claim 9
72. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal receives program signals, the set top terminal comprising:	10. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal receives program signals, the set top terminal comprising:	5,798,785, Claim 10
said subscriber specific receiving means being means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs;	a means for gathering the subscriber specific data indicative of subscriber preferences to be used in selecting programs;	5,798,785, Claim 10
means, connected to the gathering means, for storing the subscriber specific data;	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 10
said receiving means being means for receiving the program control information comprising program description data;	a means for receiving the program control information comprising program description data;	5,798,785, Claim 10
said program selection means being operably connected to the storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program control information whereby the selected programs correspond to the subscriber's programming preferences; a means, operably connected to the	a program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using the subscriber specific data and program control information whereby the selected programs correspond to the subscriber's programming preferences; a means, operably connected to the	5,798,785, Claim 10

3459-11 - 5 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
program selection means, for displaying for suggesting the selected programs to the subscriber; and	program selection means, for displaying for suggestion the selected programs to the subscriber; and	Claim 10
a means for generating a signal identifying a selected program's location on the received program signal.	a means for generating a signal identifying a selected program's location on the received program signal.	5,798,785, Claim 10
73. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing menu screen details and program description data, and a subscriber's programming preferences, by searching program abstracts stored in a database for programs which correlate to key words mapped from one or more subscriber responses to search criteria containing a plurality of selectable entries on one or more menu screens, further comprising:	14. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing menu screen details and program description data, and a subscriber's programming preferences, by searching program abstracts stored in a database for programs which correlate to key words mapped from one or more subscriber responses to search criteria containing a plurality of selectable entries on one or more menu screens, comprising:	5,798,785, Claim 14
a means for storing the program abstracts in a database;	a means for receiving the program control information; a means for storing the program abstracts in a database;	5,798,785, Claim 14
a memory means, connected to the receiving means, for storing the menu screen details;	a memory means, connected to the receiving means, for storing the menu screen details;	5,798,785, Claim 14
means, connected to the memory means for storing menu screen details, for generating menu screens using the stored menu screen details, wherein the menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the menu screens list search criteria comprising the plurality of selectable entries;	means, connected to the memory means for storing menu screen details, for generating menu screens using the stored menu screen details, wherein the menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the menu screens list search criteria comprising the plurality of selectable entries;	5,798,785, Claim 14
a display wherein the generated menu screens are displayed; said subscriber specific data receiving means being:	a display wherein the generated menu screens are displayed;	5,798,785, Claim 14 5,798,785, Claim 14

3459-11 - 6 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
a subscriber interface means for entering subscriber responses to the plurality of selectable entries on the menu screens;	a subscriber interface means for entering subscriber responses to the plurality of selectable entries on the menu screens;	5,798,785, Claim 14
a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words;	a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words;	5,798,785, Claim 14
a means, connected to the mapping means, for searching the program abstract database for programs consisting of one or more of the key words;	a means, connected to the mapping means, for searching the program abstract database for programs consisting of one or more of the key words;	5,798,785, Claim 14
said program selection means being operably connected to the receiving means and searching means, for selecting one or more programs, wherein programs are selected using the search of the searching means; and	a program selection means, operably connected to the receiving means and searching means, for selecting one or more programs, wherein programs are selected using the search of the searching means; and	5,798,785, Claim 14
wherein the display is used to suggest the selected programs to the subscriber.	wherein the display is used to suggest the selected programs to the subscriber.	5,798,785, Claim 14
74. The system of claim 73, wherein: program abstracts are included in the received program control information, and wherein the set top terminal further comprises a means connected to the receiving means, for reprogramming the means for storing the program abstracts to include the received program abstracts;	15. The set top terminal of claim 14 wherein program abstracts are included in the received program control information, and wherein the set top terminal further comprises a means connected to the receiving means, for reprogramming the means for storing the program abstracts to include the received program abstracts.	5,798,785, Claim 15
the subscriber interface means comprises a means for interpreting the subscriber responses and a means for storing the subscriber responses; and	16. The set top terminal of claim 14 wherein the subscriber interface means comprises a means for interpreting the subscriber responses and a means for storing the subscriber responses.	5,798,785, Claim 16
the stored menu screen details include a cursor overlay and the means for generating menu screens comprises a means for generating the cursor overlay and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	20. The set top terminal of claim 14 wherein the stored menu screen details include a cursor overlay and the means for generating menu screens comprises a means for generating the cursor overlay and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	5,798,785, Claim 20

3459-11 - 7 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM
75. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the set top terminal further comprising:	25. A set top terminal used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the set top terminal comprising:  a means for receiving program control	NO 5,798,785, Claim 25
	information;	
said means for receiving subscriber specific data being means for gathering the program watched data;	a means for gathering the program watched data;	5,798,785, Claim 25
a memory means for storing the gathered program watched data; said program selection means being operably connected to the memory means	a memory means for storing the gathered program watched data; a program selection means, operably connected to the memory means and the	5,798,785, Claim 25 5,798,785, Claim 25
and the receiving means, for selecting a program using the stored program watched data and the received program control information; and	receiving means, for selecting a program using the stored program watched data and the received program control information;	
a means, operably connected to the program selection means, for displaying the selected program.	a means, operably connected to the program selection means, for displaying the selected program.	5,798,785, Claim 25
76. The system according to claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information and channel watched data indicative of a subscriber's favorite channels, the set top terminal comprising:	26. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information and channel watched data indicative of a subscriber's favorite channels, the set top terminal comprising: a means for receiving the program control information;	5,798,785, Claim 26
said means for receiving subscriber specific data comprising means for gathering the channel watched data;	a means for gathering the channel watched data;	5,798,785, Claim 26
a memory means for storing the gathered channel watched data; said program selection means comprising:	a memory means for storing the gathered channel watched data;	5,798,785, Claim 26
a processing means, operably connected to the memory means and the receiving	a processing means, operably connected to the memory means and the receiving	5,798,785, Claim 26

3459-11 - 8 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
means, for determining suggested favorite channels, comprising:	means, for determining suggested favorite channels, comprising:	
a channel selection means for selecting a plurality of channels using the stored channel watched data; and	a channel selection means for selecting a plurality of channels using the stored channel watched data; and	5,798,785, Claim 26
means to generate a signal identifying the selected channels; and	means to generate a signal identifying the selected channels; and	5,798,785, Claim 26
a means, operably connected to the processing means, for displaying a representation of the selected channels.	a means, operably connected to the processing means, for displaying a representation of the selected channels.	5,798,785, Claim 26
77. The system of claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of selectable entries presented on a display, further comprising:	38. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of selectable entries presented on a display, comprising:	5,798,785, Claim 38
a means for storing the program abstracts	a means for receiving the program control information; a means for storing the program abstracts	5,798,785,
in a database;	in a database;	Claim 38
a means for presenting the plurality of selectable entries to the subscriber using the display;	a means for presenting the plurality of selectable entries to the subscriber using the display;	5,798,785, Claim 38
said means for receiving subscriber specific data comprising a subscriber interface means for entering subscriber responses to the plurality of selectable entries;	a subscriber interface means for entering subscriber responses to the plurality of selectable entries;	5,798,785, Claim 38
a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words;	a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words;	5,798,785, Claim 38
a means, connected to the mapping means and storing means, for searching the program abstract database for programs consisting of one or more of the key words;	a means, connected to the mapping means and storing means, for searching the program abstract database for programs consisting of one or more of the key words;	5,798,785, Claim 38
said program selection means being	a program selection means, operably	5,798,785,

3459-11 - 9 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
operably connected to the receiving means and searching means, for selecting one or more programs, wherein programs are selected using the search of the searching means; and	connected to the receiving means and searching means, for selecting one or more programs, wherein programs are selected using the search of the searching means; and	Claim 38
means, connected to the program selection means, for suggesting the selected programs to the subscriber using the display.	means, connected to the program selection means, for suggesting the selected programs to the subscriber using the display.	5,798,785, Claim 38
78. The system of claim 77, wherein:		
program abstracts are included in the received program control information, and wherein the set top terminal further comprises a means, connected to the receiving means, for reprogramming the means for storing the program abstracts to include the received program abstracts;	39. The set top terminal of claim 38 wherein program abstracts are included in the received program control information, and wherein the set top terminal further comprises a means, connected to the receiving means, for reprogramming the means for storing the program abstracts to include the received program abstracts.	5,798,785, Claim 39
the program control information further contains menu screen details and the selectable entries are displayed on one or more menu screens by the presenting means, the set top terminal further comprising:	40. The set top terminal of claim 38 wherein the program control information further contains menu screen details and the selectable entries are displayed on one or more menu screens by the presenting means, the set top terminal further comprising:	5,798,785, Claim 40
a memory means, connected to the receiving means, for storing the menu screen details; and	a memory means, connected to the receiving means, for storing the menu screen details; and	5,798,785, Claim 40
a means, connected to the memory means and the presenting means, for generating menu screens using the stored menu screen details, wherein the menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the generated menu screens list search criteria comprising the plurality of selectable entries; and	a means, connected to the memory means and the presenting means, for generating menu screens using the stored menu screen details, wherein the menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the generated menu screens list search criteria comprising the plurality of selectable entries.	5,798,785, Claim 40
the stored menu screen details include a cursor overlay and the means for generating menu screens comprises a means for generating the cursor overlay,	42. The set top terminal of claim 40 wherein the stored menu screen details include a cursor overlay and the means for generating menu screens comprises a	5,798,785, Claim 42

3459-11 - 10 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	means for generating the cursor overlay, and wherein the subscriber interface means comprises a means for moving the generated cursor overlay on the displayed menu screens.	
79. The system of claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing scheduled program description data, the set top terminal further comprising:	46. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing scheduled program description data, the set top terminal comprising:	5,798,785, Claim 46
a means for creating personal profile information;	a means for creating personal profile information;	5,798,785, Claim 46
a means, connected to the creating means, for storing the personal profile information;	a means, connected to the creating means, for storing the personal profile information;	5,798,785, Claim 46
said means for receiving program control information being means for receiving the program control information comprising the scheduled program description data;	means for receiving the program control information comprising the scheduled program description data;	5,798,785, Claim 46
said program selection means being means, connected to the storing means and receiving means, for selecting at least one program for suggestion to the viewer, comprising:	a means, connected to the storing means and receiving means, for selecting at least one program for suggestion to the viewer, comprising:	5,798,785, Claim 46
a means for transforming the personal profile information into preferred program indicators, wherein a preferred program indicator comprises a program category with each program category having a weighted value;	a means for transforming the personal profile information into preferred program indicators, wherein a preferred program indicator comprises a program category with each program category having a weighted value;	5,798,785, Claim 46
a means for matching the preferred program indicators with the scheduled program description data, wherein each scheduled program is assigned a weighted value based on at least one associated program category;	a means for matching the preferred program indicators with the scheduled program description data, wherein each scheduled program is assigned a weighted value based on at least one associated program category;	5,798,785, Claim 46
a means for prioritizing the scheduled programs from highest weighted value programs to lowest weighted value programs; and	a means for prioritizing the scheduled programs from highest weighted value programs to lowest weighted value programs;	5,798,785, Claim 46
a means for indicating one or more	a means for indicating one or more	5,798,785,

3459-11 - 11 -

٩.

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
programs meeting a predetermined weight related threshold, wherein all other programs are excluded from program suggestion; and	programs meeting a predetermined weight related threshold, wherein all other programs are excluded from program suggestion; and	Claim 46
means, operably connected to the program selection means, for displaying for suggesting the selected programs to the subscriber.	means, operably connected to the program selection means, for displaying for suggestion the selected programs to the subscriber.	5,798,785, Claim 46
80. The system of claim 66, being a set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing scheduled program description data, the set top terminal further comprising:	50. A set top terminal used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing scheduled program description data, the set top terminal comprising:	5,798,785, Claim 50
said means for receiving subscriber specific data being means for gathering program watched data;	a means for gathering program watched data;	5,798,785, Claim 50
a means, connected to the gathering means, for storing the program watched data;	a means, connected to the gathering means, for storing the program watched data;	5,798,785, Claim 50
said means for receiving program control information being means for receiving the program control information comprising the scheduled program description data;	means for receiving the program control information comprising the scheduled program description data;	5,798,785, Claim 50
said program selection means being means, connected to the storing means and receiving means, for selecting at least one program for suggestion to the viewer, comprising:	a means, connected to the storing means and receiving means, for selecting at least one program for suggestion to the viewer, comprising:	5,798,785, Claim 50
a means for transforming the program watched data into preferred program indicators, wherein a program indicator comprises a program category with each program category having a weighted value;	a means for transforming the program watched data into preferred program indicators, wherein a program indicator comprises a program category with each program category having a weighted value;	5,798,785, Claim 50
a means for comparing the preferred program indicators with the scheduled program description data, wherein each scheduled program is assigned a weighted value based on at least one associated program category;  a means for prioritizing the scheduled	a means for comparing the preferred program indicators with the scheduled program description data, wherein each scheduled program is assigned a weighted value based on at least one associated program category;  a means for prioritizing the scheduled	5,798,785, Claim 50

3459-11 - 12 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM
		NO
programs from highest weighted value programs to lowest weighted value programs; and	programs from highest weighted value programs to lowest weighted value programs;	Claim 50
a means for indicating one or more programs meeting a predetermined weight threshold, wherein all other programs are excluded from program suggestion; and	a means for indicating one or more programs meeting a predetermined weight threshold, wherein all other programs are excluded from program suggestion; and	5,798,785, Claim 50
means, operably connected to the program selection means, for displaying for suggesting the selected programs to the subscriber.	means, operably connected to the program selection means, for displaying for suggestion the selected programs to the subscriber.	5,798,785, Claim 50
81. The system of claim 67, wherein the program selection means resides within a network controller.	wherein the program selection means resides within a network controller; and	5,798,785, Claim 52
82. The system according to claim 66, being a terminal for program suggestion using user preference data concerning user preferences and program control information concerning available programs, comprising:	28. A terminal for program suggestion using user preference data concerning user preferences and program control information concerning available programs, comprising:	5,798,785, Claim 28
said means for receiving subscriber specific data comprising means for gathering the user preference data;	a means for gathering the user preference data;	5,798,785, Claim 28
a means, connected to the gathering means, for storing the gathered user preference data;	a means, connected to the gathering means, for storing the gathered user preference data;	5,798,785, Claim 28
said means for receiving program control information comprising means for accessing the program control information;	a means for accessing the program control information;	5,798,785, Claim 28
said program selection means being means, connected to the storing means and accessing means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	a means, connected to the storing means and accessing means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	5,798,785, Claim 28
a processor, wherein the subscriber programming preferences are generated from the user preference data; and	a processor, wherein the subscriber programming preferences are generated from the user preference data; and	5,798,785, Claim 28
a means, connected to the selecting means, for suggesting the selected	a means, connected to the selecting means, for suggesting the selected	5,798,785, Claim 28

3459-11 - 13 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
programs to the user.	programs to the user.	
83. The system of claim 66, being a program suggestion system for suggesting programs to subscribers of a television program delivery system by using program control information containing program description data and by searching program abstracts stored in a database at a network controller, the suggested programs resulting from a search of the program abstracts for key words sent to the network controller from a set top terminal, wherein the key words are mapped from one or more subscriber responses to a plurality of selectable entries at the set top terminal, the system comprising:	36. A program suggestion system for suggesting programs to subscribers of a television program delivery system by using program control information containing program description data and by searching program abstracts stored in a database at a network controller, the suggested programs resulting from a search of the program abstracts for key words sent to the network controller from a set top terminal, wherein the key words are mapped from one or more subscriber responses to a plurality of selectable entries at the set top terminal, the system comprising:	5,798,785, Claim 36
a set top terminal comprising:	a set top terminal comprising:	5,798,785, Claim 36
a means for receiving programs;	a means for receiving programs;	5,798,785, Claim 36
a means for presenting the plurality of selectable entries to the subscriber; said means for receiving subscriber specific data being a subscriber interface means for entering subscriber responses to the plurality of selectable entries; and	a means for presenting the plurality of selectable entries to the subscriber; a subscriber interface means for entering subscriber responses to the plurality of selectable entries; and	5,798,785, Claim 36 5,798,785, Claim 36
a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words; and	a means, connected to the subscriber interface means, for mapping the subscriber responses into the key words; and	5,798,785, Claim 36
a network controller, networked to the set top terminal, comprising: said means for receiving the program control information; a means for storing the program abstracts in a data base; a means for gathering the key words;	a network controller, networked to the set top terminal, comprising:  a means for receiving the program control information;  a means for storing the program abstracts in a data base;  a means for gathering the key words;	5,798,785, Claim 36 5,798,785, Claim 36 5,798,785, Claim 36 5,798,785,
said program selection means being operably connected to the receiving means, gathering means and storing means, for selecting one or more	a program selection means, operably connected to the receiving means, gathering means and storing means, for selecting one or more programs for	Claim 36 5,798,785, Claim 36

3459-11 - 14 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
programs for suggestion to the subscriber, comprising:	suggestion to the subscriber, comprising:	
a means for searching the program abstract data base for program abstracts consisting of one or more key words; and	a means for searching the program abstract data base for program abstracts consisting of one or more key words; and	5,798,785, Claim 36
a means for distributing the selected programs to the set top terminal.	a means for distributing the selected programs to the set top terminal.	5,798,785, Claim 36
84. The system of claim 66, being an apparatus for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the apparatus comprising:	51. An apparatus for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the apparatus comprising: a means for receiving the program control information; and	5,798,785, Claim 51
said means for receiving subscriber specific data being means for gathering the subscriber specific data to be used in selecting programs;	a means for gathering the subscriber specific data to be used in selecting programs;	5,798,785, Claim 51
a means, connected to the gathering means, for storing the subscriber specific data; and	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 51
said program selection means being operably connected to the storing means and the receiving means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	a program selection means, operably connected to the storing means and the receiving means, for selecting one or more programs using a subscriber's programming preferences and the program control information, comprising:	5,798,785, Claim 51
a processor, wherein the subscriber programming preferences are generated from the subscriber specific data.	a processor, wherein the subscriber programming preferences are generated from the subscriber specific data.	5,798,785, Claim 51
85. The system according to claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the apparatus further comprising:	54. An apparatus used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the apparatus comprising:	5,798,785, Claim 54
said means for receiving subscriber specific data being a remote control, wherein the subscriber specific data is	a remote control, wherein the subscriber specific data is obtained to be used in selecting programs;	5,798,785, Claim 54

3459-11 - 15 -

remote control, wherein the subscriber specific data is stored; said means for receiving program control information being a demodulator, wherein the program control information containing the program description data is received; said program selection means being a central processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and a display, operably connected to the subscriber on the display.  86. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control a demodulator, wherein the program control information containing the program demodulator, wherein the program description data is received;  5,798, Claim control information containing the program demodulator, wherein the program demodulator, wherein the program at entral processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber specific data; and a display, operably connected to the subscriber specific data; and a display, operably connected to the processor, wherein the selected programs are suggested to the subscriber on the display.  Solution of the program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control ada is received;  3,798, Claim control information, and the program control information, and the program control information and program sare suggested to the subscriber on the display.  Solution of the progra	CATION CLAIM	PATENT CLAIM	CLAIM NO
remote control, wherein the subscriber specific data is stored; said means for receiving program control information being a demodulator, wherein the program description data is received; said program selection means being a central processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and a display, operably connected to the subscriber on the display.  86. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;  claim demodulator, wherein the program control information containing the program description data is received;  control information containing the program description data is received;  said program selection means being a central processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and  a display, operably connected to the processor, wherein the selected programs are suggested to the subscriber on the display.  S5. An apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;	d to be used in selecting programs;		
information being a demodulator, wherein the program control information containing the program description data is received;  said program selection means being a central processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and a display, operably connected to the processor, wherein the selected programs are suggested to the subscriber on the display.  86. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for received;  control information containing the program description data is received;  control information containing the program description data is received;  control information containing the program description data is received;  control information containing the program description data is received;  control information data is received;  5,798, Claim  control information, and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber specific data; and a display, operably connected to the subscriber on the display.  5,798, Claim  control information, and the demodulator, wherein the subscriber on the subscriber on the subscriber on the display.  5,798, Claim  control information containing the program description data is received;  5,798, Claim  control information, control information, and the program control information, and wherein the subscriber's programs through the subscriber on the display.  5,798, Claim  control information control information, and the program control information control information, and entered to the program control	control, wherein the subscriber	remote control, wherein the subscriber	5,798,785, Claim 54
central processing unit, operably connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and a display, operably connected to the processor, wherein the selected programs are suggested to the subscriber on the display.  86. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information being a demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the subscriber specific data; and a display, operably connected to the processor, wherein the selected programs are suggested to the subscriber on the display.  55. An apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;  claim	ation being a demodulator, wherein gram control information ing the program description data is	control information containing the	5,798,785, Claim 54
processor, wherein the selected programs are suggested to the subscriber on the display.  86. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;  processor, wherein the selected programs are suggested to the subscriber on the display.  55. An apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;  Claim  57.798, Claim  57.798, Claim  57.798, Claim	processing unit, operably ted to the memory and the ulator, wherein programs are d using a subscriber's programming nces and the program control ation, and wherein the subscriber nming preferences are generated	connected to the memory and the demodulator, wherein programs are selected using a subscriber's programming preferences and the program control information, and wherein the subscriber programming preferences are generated from the	5,798,785, Claim 54
apparatus used by subscribers of a television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information being a demodulator, wherein television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the apparatus comprising:  said means for receiving program control information is received;  Claim	sor, wherein the selected programs gested to the subscriber on the	processor, wherein the selected programs are suggested to the subscriber on the	5,798,785, Claim 54
information being a demodulator, wherein control information is received; Claim	on program delivery system for ing programs through the use of control information and program d data indicative of a subscriber's ratched programs, the apparatus	television program delivery system for suggesting programs through the use of program control information and program watched data indicative of a subscriber's most watched programs, the	5,798,785, Claim 55
received;	ation being a demodulator, wherein gram control information is		5,798,785, Claim 55
said means for receiving subscriber a remote control interface, wherein the 5,798,	eans for receiving subscriber characteristic data being a remote control ce, wherein the program watched		5,798,785, Claim 55
a memory, wherein the gathered program watched data is stored; a memory, wherein the gathered program said program selection means being a a processor, operably connected to the 5,798,	ory, wherein the gathered program d data is stored; ogram selection means being a sor, operably connected to the	watched data is stored; a processor, operably connected to the memory and the demodulator, wherein a	5,798,785, Claim 55 5,798,785, Claim 55

3459-11 - 16 -

\*

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
program is selected using the stored program watched data and the received program control information;	program watched data and the received program control information;	
a display, operably connected to the processor, for displaying the selected program.	a display, operably connected to the processor, for displaying the selected program.	5,798,785, Claim 55
87. The system of claim 66, being an apparatus used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of selectable entries presented on a display, the apparatus further comprising:	56. An apparatus used by subscribers of a television program delivery system for suggesting programs to subscribers using program control information containing program description data, by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of selectable entries presented on a display, the apparatus comprising:	5,798,785, Claim 56
said means for receiving program control information being a demodulator, wherein the program control information is demodulated;	a demodulator, wherein the program control information is demodulated;	5,798,785, Claim 56
a memory, connected to the demodulator, wherein the program abstracts are stored; a combiner, wherein the plurality of selectable entries are presented to the subscriber using the display; said means for receiving subscriber specific data being a subscriber interface,	a memory, connected to the demodulator, wherein the program abstracts are stored; a combiner, wherein the plurality of selectable entries are presented to the subscriber using the display; a subscriber interface, wherein subscriber responses to the plurality of selectable	5,798,785, Claim 56 5,798,785, Claim 56 5,798,785, Claim 56
wherein subscriber responses to the plurality of selectable entries are entered; logic circuitry, connected to the subscriber interface, wherein the	logic circuitry, connected to the subscriber interface, wherein the	5,798,785, Claim 56
subscriber responses are mapped into the key words; said program selection means being a processor, operably connected to the logic	subscriber responses are mapped into the key words; a processor, operably connected to the logic circuitry and the memory, wherein	5,798,785, Claim 56
circuitry and the memory, wherein the stored program abstracts are searched for programs consisting of one or more of the key words, and wherein one or more programs are selected using the search; and	the stored program abstracts are searched for programs consisting of one or more of the key words, and wherein one or more programs are selected using the search; and	
wherein the selected programs are	wherein the selected programs are	5,798,785,

3459-11 - 17 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
suggested to the subscriber using the display.	suggested to the subscriber using the display.	Claim 56
88. The system according to claim 66, being a network controller, adapted for remotely controlling a plurality of set top terminals in a television program delivery system, for suggesting programs to subscribers by making program suggestions using subscriber specific data and program control information received from a remotely located source containing program description data, wherein the suggested programs are transmitted to the set top terminal, the network controller comprising:	33. A network controller, adapted for remotely controlling a plurality of set top terminals in a television program delivery system, for suggesting programs to subscribers by making program suggestions using subscriber specific data and program control information received from a remotely located source containing program description data, wherein the suggested programs are transmitted to the set top terminal, the network controller comprising:	5,798,785, Claim 33
said means for receiving program control information comprising means for receiving the program control information containing program description data;	a means for receiving the program control information containing program description data;	5,798,785, Claim 33
said means for receiving subscriber specific data comprising means for gathering the subscriber specific data from a set top terminal;	a means for gathering the subscriber specific data from a set top terminal;	5,798,785, Claim 33
a means, connected to the gathering means, for storing the subscriber specific data;	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 33
said program selection means being means, operably connected to the receiving means and the storing means, for suggesting one or more programs using a subscriber's programming preferences and the received program control information, comprising:	a means, operably connected to the receiving means and the storing means, for suggesting one or more programs using a subscriber's programming preferences and the received program control information, comprising:	5,798,785, Claim 33
a processor, wherein the subscriber programming preferences are generated from the subscriber specific data; and	a processor, wherein the subscriber programming preferences are generated from the subscriber specific data; and	5,798,785, Claim 33
a means, connected to the suggesting means, for transmitting the suggested programs to the set top terminal for presentation to the subscriber.	a means, connected to the suggesting means, for transmitting the suggested programs to the set top terminal for presentation to the subscriber.	5,798,785, Claim 33
89. The system of claim 88, wherein key words are used in searching program	34. The network controller of claim 33 wherein key words are used in searching	5,798,785, Claim 34

3459-11 - 18 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
abstracts to assist in suggesting programs, and wherein the network controller further comprises:	program abstracts to assist in suggesting programs, and wherein the network controller further comprises:	
a means for storing program abstracts; and	a means for storing program abstracts; and	5,798,785, Claim 34
wherein the means for suggesting comprises a means for searching the stored program abstracts for one or more programs consisting of one or more of the key words.	wherein the means for suggesting comprises a means for searching the stored program abstracts for one or more programs consisting of one or more of the key words.	5,798,785, Claim 34
90. The system according to claim 66, being a network controller, adapted for remotely controlling a plurality of set top terminals in a television program delivery system, for suggesting programs to subscribers by making program suggestions using subscriber specific data indicative of a subscriber's programming preferences received from a set top terminal, program control information received from a remotely located source containing program description data, and program abstracts with key words, wherein the suggested programs are transmitted to the set top terminal, the network controller comprising:	35. A network controller, adapted for remotely controlling a plurality of set top terminals in a television program delivery system, for suggesting programs to subscribers by making program suggestions using subscriber specific data indicative of a subscriber's programming preferences received from a set top terminal, program control information received from a remotely located source containing program description data, and program abstracts with key words, wherein the suggested programs are transmitted to the set top terminal, the network controller comprising:	5,798,785, Claim 35
said means for receiving program control information being means for receiving the program control information containing program description data;	a means for receiving the program control information containing program description data;	5,798,785, Claim 35
said means for receiving subscriber specific data being means for gathering the subscriber specific data indicative of subscriber preferences from a set top terminal;	a means for gathering the subscriber specific data indicative of subscriber preferences from a set top terminal;	5,798,785, Claim 35
a means, connected to the gathering means, for storing the subscriber specific data;	a means, connected to the gathering means, for storing the subscriber specific data;	5,798,785, Claim 35
a memory means for storing program abstracts;	a memory means for storing program abstracts;	5,798,785, Claim 35
said program selection means being means, operably connected to the receiving means and the storing means,	a means, operably connected to the receiving means and the storing means, for suggesting one or more programs	5,798,785, Claim 35

3459-11 - 19 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
for suggesting one or more programs using the stored subscriber specific data and the received program control information, whereby the suggested programs correspond to the subscriber's programming preferences, wherein key words are used in searching the stored program abstracts to assist in suggesting programs, and wherein the means for suggesting comprises:	using the stored subscriber specific data and the received program control information, whereby the suggested programs correspond to the subscriber's programming preferences, wherein key words are used in searching the stored program abstracts to assist in suggesting programs, and wherein the means for suggesting comprises:	
a means for searching the stored program abstracts for one or more programs consisting of one or more of the key words; and	a means for searching the stored program abstracts for one or more programs consisting of one or more of the key words; and	5,798,785, Claim 35
a means, connected to the suggesting means, for transmitting the suggested programs to the set top terminal for presentation to the subscriber.	a means, connected to the suggesting means, for transmitting the suggested programs to the set top terminal for presentation to the subscriber.	5,798,785, Claim 35
91. The system of claim 66, being a network controller for suggesting programs to subscribers of a television program delivery system by using program control information containing program description data and by searching program abstracts for key words that are mapped from one or more subscriber responses received from a set top terminal, further comprising:	37. A network controller for suggesting programs to subscribers of a television program delivery system by using program control information containing program description data and by searching program abstracts for key words that are mapped from one or more subscriber responses received from a set top terminal, comprising:	5,798,785, Claim 37
	a means for receiving the program control information;	
a means for storing the program abstracts in a data base; said means for receiving subscriber specific data comprising a means for gathering subscriber responses to a	a means for storing the program abstracts in a data base; a means for gathering subscriber responses to a plurality of selectable entries from the set top terminal;	5,798,785, Claim 37 5,798,785, Claim 37
plurality of selectable entries from the set top terminal; a means, connected to the gathering means, for mapping the subscriber responses into the key words;	a means, connected to the gathering means, for mapping the subscriber responses into the key words;	5,798,785, Claim 37
a means, operably connected to the receiving means, storing means, gathering means and mapping means, for suggesting	a means, operably connected to the receiving means, storing means, gathering means and mapping means, for	5,798,785, Claim 37

3459-11 - 20 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
one or more programs, comprising:	suggesting one or more programs, comprising:	
said selecting means comprising means,	a means, connected to the storing and	5,798,785,
connected to the storing and mapping	mapping means, for searching the	Claim 37
means, for searching the program abstract	program abstract data base for one or	
data base for one or more key words; and	more key words; and	
a means for distributing the suggested	a means for distributing the suggested	5,798,785,
programs to the set top terminal.	programs to the set top terminal.	Claim 37
92. A method, comprising the steps of:	Generic	5,798,785, Claim 11
receiving subscriber specific data;		
receiving program control information; and		
selecting one or more programs using the user subscriber specific information and the program control information.		
93. The method of claim 92, used by a set	11. A method used by a set top terminal	5,798,785,
top terminal for a television program	for a television program delivery system	Claim 11
delivery system for suggesting programs	for suggesting programs to subscribers	
to subscribers for display on a television	for display on a television using program	
using program control information and	control information and subscriber	
subscriber specific data, the method	specific data, the method comprising:	
further comprising:		
said receiving subscriber specific data	gathering subscriber specific data to be	5,798,785,
comprising gathering subscriber specific	used in selecting programs;	Claim 11
data to be used in selecting programs;		
storing the gathered subscriber specific	storing the gathered subscriber specific	5,798,785,
data;	data;	Claim 11
said receiving program control	receiving program control information to	5,798,785,
information comprising receiving	be used in selecting programs;	Claim 11
program control information to be used in		
selecting programs;		
said selecting step comprising selecting	selecting one or more programs using a	5,798,785,
one or more programs using a subscriber's	subscriber's programming preferences	Claim 11
programming preferences and the	and the received program control	
received program control information,	information, wherein the subscriber	
wherein the subscriber programming	programming preferences are generated	
preferences are generated from the	from the subscriber specific data; and	
subscriber specific data; and		
suggesting the selected programs to the	suggesting the selected programs to the	5,798,785,
subscriber.	subscriber.	Claim 11

3459-11 - 21 -

: 4

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
94. The method of claim 93, wherein a display is used and wherein the set top terminal generates menus based on menu details received over the program television delivery system further comprising the following steps:	12. The method of claim 11 wherein a display is used and wherein the set top terminal generates menus based on menu details received over the program television delivery system further comprising the following steps:	5,798,785, Claim 12
storing the received menu details;	storing the received menu details;	5,798,785, Claim 12
generating menu screens using the stored menu details by integrating the received program control information with the stored menu details;	generating menu screens using the stored menu details by integrating the received program control information with the stored menu details;	5,798,785, Claim 12
displaying menu screens whereby the menu screens identify the selected programs; and	displaying menu screens whereby the menu screens identify the selected programs; and	5,798,785, Claim 12
receiving subscriber responses to the displayed menu screens.	receiving subscriber responses to the displayed menu screens.	5,798,785, Claim 12
95. The method of claim 92, used by a set top terminal for a television program delivery system for suggesting programs to subscribers for display on a television using program control information and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal generates menus based on menu details received over the program television delivery system, the method comprising the following steps:	13. A method used by a set top terminal for a television program delivery system for suggesting programs to subscribers for display on a television using program control information and subscriber specific data indicative of a subscriber's programming preferences, wherein the set top terminal generates menus based on menu details received over the program television delivery system, the method comprising the following steps:	5,798,785, Claim 13
storing the received menu details;	storing the received menu details;	5,798,785, Claim 13
said receiving subscriber specific data comprising gathering subscriber specific data indicative of subscriber preferences to be used in selecting programs;	gathering subscriber specific data indicative of subscriber preferences to be used in selecting programs;	5,798,785, Claim 13

3459-11 - 22 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM
AT LICATION CLAIM	. CEAIN	CLAIM NO
storing the gathered subscriber specific	storing the gathered subscriber specific	5,798,785,
data;	data;	Claim 13
said receiving program control	receiving program control information to	5,798,785,
information comprising receiving	be used in selecting programs;	Claim 13
program control information to be used in	be used in screening programs,	Ciaiiii 13
selecting programs;		
said selecting step comprising selecting	selecting one or more programs using the	5,798,785,
one or more programs using the stored	stored subscriber specific data and	Claim 13
subscriber specific data and received	received program control information	Claim 13
program control information wherein the	wherein the selected programs	
selected programs correspond to the	correspond to the subscriber's	
subscriber's programming preferences;	programming preferences;	
generating menu screens using the stored	generating menu screens using the stored	5,798,785,
menu details by integrating the received	menu details by integrating the received	Claim 13
program control information and the	program control information and the	Ciaiii 13
stored menu details;	stored menu details;	
displaying menu screens whereby the	displaying menu screens whereby the	5,798,785,
menu screens identify the selected	menu screens identify the selected	Claim 13
programs and suggest the selected	programs and suggest the selected	Ciaiiii 13
programs to the subscriber; and	programs to the subscriber; and	
receiving subscriber responses to the	receiving subscriber responses to the	5,798,785,
menu screens.	menu screens.	Claim 13
mena screens.	menu sercens.	Ciaiii 13
96. The method of claim 92, used by a set	21. A method used by a set top terminal	5,798,785,
top terminal for a television program	for a television program delivery system	Claim 21
delivery system for suggesting	for suggesting programming to	Claim 21
programming to subscribers using	subscribers using program control	
program control information containing	information containing menu screen	
menu screen details by searching program	details by searching program abstracts	
abstracts for programs which correlate to	for programs which correlate to key	
key words mapped from one or more	words mapped from one or more	
subscriber responses to search criteria	subscriber responses to search criteria	
containing a plurality of selectable entries	containing a plurality of selectable	
on one or more menu screens displayed	entries on one or more menu screens	
on a television, comprising the steps of:	displayed on a television, comprising the	
on a television, comprising the steps of:	steps of:	
	steps of.	
	receiving the program control	
	information;	
storing the program abstracts in a	storing the program abstracts in a	5,798,785,
database;	database;	Claim 21
storing menu screen details;	storing menu screen details;	5,798,785,
3,	]	Claim 21
generating the menu screens wherein the	generating the menu screens wherein the	5,798,785,

3459-11 - 23 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the generated menu screens list the search criteria containing the plurality of selectable entries;	menu screens are generated by integrating the program control information with the stored menu screen details, and wherein the generated menu screens list the search criteria containing the plurality of selectable entries;	Claim 21
displaying the menu screens;	displaying the menu screens;	5,798,785, Claim 21
said receiving subscriber specific data comprising gathering subscriber responses to the plurality of selectable entries on the menu screens;	gathering subscriber responses to the plurality of selectable entries on the menu screens;	5,798,785, Claim 21
mapping the subscriber responses into the	mapping the subscriber responses into the key words;	5,798,785, Claim 21
key words; searching the stored program abstracts for abstracts comprising one or more of the key words;	searching the stored program abstracts for abstracts comprising one or more of the key words;	5,798,785, Claim 21
said selecting step comprising selecting one or more of the programs, whereby the programs are selected using the search of the stored program abstracts; and	selecting one or more of the programs, whereby the programs are selected using the search of the stored program abstracts; and	5,798,785, Claim 21
suggesting the selected programs.	suggesting the selected programs.	5,798,785, Claim 21
97. The method of claim 92, used in a television program delivery system for suggesting programs to subscribers for display on a television using program control information and subscriber specific data, the method further comprising:	43. A method used in a television program delivery system for suggesting programs to subscribers for display on a television using program control information and subscriber specific data, the method comprising:	5,798,785, Claim 43
said receiving subscriber specific data comprising gathering subscriber specific data to be used in selecting programs;	gathering subscriber specific data to be used in selecting programs;	5,798,785, Claim 43
storing the gathered subscriber specific data;	storing the gathered subscriber specific data;	5,798,785, Claim 43
said receiving program control information comprising receiving program control information to be used in selecting programs; and	receiving program control information to be used in selecting programs;	5,798,785, Claim 43
said selecting step comprising selecting one or more programs using a subscriber's programming preferences and the received program control information,	selecting one or more programs using a subscriber's programming preferences and the received program control information, wherein the subscriber	5,798,785, Claim 43

3459-11 - 24 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
wherein the subscriber programming preferences are generated from the subscriber specific data; and suggesting the selected programs to the subscriber.	programming preferences are generated from the subscriber specific data; and suggesting the selected programs to the subscriber.	
98. The method of claim 92, used in a television program delivery system for suggesting programming to subscribers using program control information containing menu screen details by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to search criteria containing a plurality of selectable entries on one or more menu screens displayed on a television, comprising the steps of:	44. A method used in a television program delivery system for suggesting programming to subscribers using program control information containing menu screen details by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to search criteria containing a plurality of selectable entries on one or more menu screens displayed on a television, comprising the steps of:	5,798,785, Claim 44
	receiving the program control information;	
storing the program abstracts in a	storing the program abstracts in a	5,798,785, Claim 44
database;	database; storing the menu screen details;	5,798,785,
storing the menu screen details;	storing the menu screen details,	Claim 44
generating the menu screens wherein the menu screens are generated by integrating the received program control information with the stored menu screen details, and wherein the generated menu screens list the search criteria containing the plurality of selectable entries;	generating the menu screens wherein the menu screens are generated by integrating the received program control information with the stored menu screen details, and wherein the generated menu screens list the search criteria containing the plurality of selectable entries;	5,798,785, Claim 44
displaying the menu screens;	displaying the menu screens;	5,798,785, Claim 44
said receiving subscriber specific data comprising gathering subscriber responses to the plurality of selectable entries on the menu screens;	gathering subscriber responses to the plurality of selectable entries on the menu screens;	5,798,785, Claim 44
mapping the gathered subscriber responses into the key words; searching the stored program abstracts for abstracts comprising one or more of the key words;	mapping the gathered subscriber responses into the key words; searching the stored program abstracts for abstracts comprising one or more of the key words;	5,798,785, Claim 44 5,798,785, Claim 44
said selecting step comprising selecting one or more of the programs, whereby the	selecting one or more of the programs, whereby the programs are selected using	5,798,785, Claim 44

3459-11 - 25 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
programs are selected using the search of the stored program abstracts; and	the search of the stored program abstracts; and	
suggesting the selected programs.	suggesting the selected programs.	5,798,785, Claim 44
99. The method of claim 92, used in a television program delivery system for suggesting programming to subscribers using program control information and by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of presented selectable entries, comprising the steps of:	45. A method used in a television program delivery system for suggesting programming to subscribers using program control information and by searching program abstracts for programs which correlate to key words mapped from one or more subscriber responses to a plurality of presented selectable entries, comprising the steps of:  receiving the program control information;	5,798,785, Claim 46
storing the program abstracts in a database; presenting the plurality of selectable entries; said receiving subscriber specific data comprising gathering subscriber responses to the plurality of selectable	storing the program abstracts in a database; presenting the plurality of selectable entries; gathering subscriber responses to the plurality of selectable entries;	5,798,785, Claim 46 5,798,785, Claim 46 5,798,785, Claim 46
entries; mapping the gathered subscriber responses into the key words; searching the stored program abstracts for abstracts comprising one or more of the key words; said selecting step comprising selecting	mapping the gathered subscriber responses into the key words; searching the stored program abstracts for abstracts comprising one or more of the key words; selecting one or more of the programs,	5,798,785, Claim 46 5,798,785, Claim 46 5,798,785,
one or more of the programs, whereby the programs are selected using the search of the stored program abstracts; and suggesting the selected programs.	whereby the programs are selected using the search of the stored program abstracts; and suggesting the selected programs.	Claim 46 5,798,785, Claim 46
100. The method of claim 92, for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the method comprising:	53. A method for suggesting programs to subscribers using program control information containing program description data, and subscriber specific data, the method comprising: receiving the program control	5,798,785, Claim 53

3459-11 - 26 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
	information; and	
said receiving subscriber specific data comprising gathering the subscriber specific data to be used in selecting programs;	gathering the subscriber specific data to be used in selecting programs;	5,798,785, Claim 53
storing the subscriber specific data;	storing the subscriber specific data;	5,798,785, Claim 53
said selecting step comprising selecting one or more programs using a subscriber's programming preferences and the program control information, wherein the subscriber's programming preferences are generated from the subscriber specific data.	selecting one or more programs using a subscriber's programming preferences and the program control information, wherein the subscriber's programming preferences are generated from the subscriber specific data.	5,798,785, Claim 53
101. A method for controlling rendering of a signal having a plurality of channels,	24. A method for controlling rendering of a signal having a plurality of channels,	5,867,205, Claim 24
said method comprising:	said method comprising:	
(a) analyzing textual information decoded from a signal having a plurality of channels to determine whether channel contents of said channels are among channel contents defined by selection data; and	(a) analyzing textual information decoded from a signal having a plurality of channels to determine whether channel contents of said channels are among channel contents defined by selection data; and	5,867,205, Claim 24
(b) arbitrating display and/or record resource contentions among said analyzed channels having channel contents defined by said selection data.	(b) arbitrating display and/or record resource contentions among said analyzed channels having channel contents defined by said selection data.	5,867,205, Claim 24
102. The method of claim 101, wherein said analyzing step comprises:		
tuning to said channels to receive said channels, and decoding textual information included with said channels; and	25. The method of claim 24 wherein (a) includes tuning to said channels to receive said channels, and decoding textual information included with said channels.	5,867,205, Claim 25
pre-defining said selection data employed in said analyzing step.	26. The method of claim 24 wherein (a) includes pre-defining said selection data	5,867,205, Claim 26

3459-11 - 27 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
	employed in said analyzing step.	
103. An apparatus for performing the method of claim 101, comprising:	1. An apparatus for controlling selective display and/or recording of selected ones of a plurality of channels of a communication signal, the apparatus comprising:	5,867,205, Claim 1
(a) one or more analyzing units for receiving textual information indicative of channel contents of said channels decoded from a communication signal, and responsive thereto, analyzing said received textual information to determine if channel contents of said channels are among channel contents defined by selection data; and	(a) one or more analyzing units for	5,867,205, Claim 1
(b) an arbitrating unit coupled to said one or more analyzing units to arbitrate display and/or record resource contentions among said analyzing units determining said channels having channel contents that are defined by said selection data.	(b) an arbitrating unit coupled to said one or more analyzing units to arbitrate display and/or record resource contentions among said analyzing units determining said channels having channel contents that are defined by said selection data.	5,867,205, Claim 1
104. The apparatus of claim 103, for controlling selective display and/or recording of selected ones of a plurality of channels of a communication signal, wherein:		5,867,205, Claim 2
said arbitrating unit includes an arbitration logic routine for arbitrating said display and/or record resource contentions, in accordance with predefined priority information of said selection data,	2. The apparatus of claim 1 wherein said arbitrating unit includes an arbitration logic routine for arbitrating said display and/or record resource contentions, in accordance with predefined priority information of said selection data.	5,867,205, Claim 2
one or more decoding units coupled to said one or more analyzing units for providing said textual information of said channels to said analyzing units, said one or more decoding units receiving said channels of said communication signal, and in response decoding said channels for textual information included in said	3. The apparatus of claim 1 wherein the apparatus further includes one or more decoding units coupled to said one or more analyzing units for providing said textual information of said channels to said analyzing units, said one or more decoding units receiving said channels of said communication signal, and in	5,867,205, Claim 3

3459-11 - 28 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
channels;	response decoding said channels for textual information included in said channels.	
one or more signal tuning units coupled to said one or more decoding units for providing said one or more decoding units with said channels, by tuning to said channels of said communication signal; and	4. The apparatus of claim 3, wherein the apparatus further includes one or more signal tuning units coupled to said one or more decoding units for providing said one or more decoding units with said channels, by tuning to said channels of said communication signal.	5,867,205, Claim 4
one or more buffers coupled to said one or more tuning units for storing portions of the contents of said channels of said communication signal for a predetermined duration of time.	comprising one or more buffers coupled to said one or more tuning units for	5,867,205, Claim 5
105. The apparatus of claim 103, wherein:		
the contents of said channels include audio/video contents, and said selection data include predefined priority of said audio/video contents;	6. The apparatus of claim 1 wherein the contents of said channels include audio/video contents, and said selection data include predefined priority of said audio/video contents.	5,867,205, Claim 6
said selection data include predefined keywords and priorities of selected ones of said channels;	7. The apparatus of claim 1 wherein said selection data include predefined keywords and priorities of selected ones of said channels.	5,867,205, Claim 7
said arbitrating unit automatically causes a display window for displaying the channel contents of a successful one of said arbitrating channels to be activated, amplification of audio signals associated with the activated display window to be adjusted, and/or channel contents of said successful one of said arbitrating channels to be recorded; and	8. The apparatus of claim 1, wherein said arbitrating unit automatically causes a display window for displaying the channel contents of a successful one of said arbitrating channels to be activated, amplification of audio signals associated with the activated display window to be adjusted, and/or channel contents of said successful one of said arbitrating channels to be recorded.	5,867,205, Claim 8
the apparatus further comprises	O. The appropriate of claims 1 who waits the	5 967 205
a profile unit coupled to said one or more analyzing units for providing said one or more analyzing units with said selection data; and	9. The apparatus of claim 1, wherein the apparatus further includes a profile unit coupled to said one or more analyzing units for providing said one or more analyzing units with said selection data.	5,867,205, Claim 9
one or more recorders for recording	18. The computer system of claim 11	5,867,205,

3459-11 - 29 -

\*

APPLICATION CLAIM	PATENT CLAIM	CLAIM
channel contents of successful ones of said arbitrating channels; and	further comprising one or more recorders for recording channel contents of successful ones of said arbitrating channels.	NO Claim 18
one more decoders coupled to said one or more analyzers for providing said textual information of said channels to said one or more analyzers, said one or more decoders receiving said channels of said signal, and in response decoding said channels for textual information included in said channels.	19. The computer system of claim 11, wherein the computer system further includes one more decoders coupled to said one or more analyzers for providing said textual information of said channels to said one or more analyzers, said one or more decoders receiving said channels of said signal, and in response decoding said channels for textual information included in said channels.	5,867,205, Claim 19
106. The apparatus of claim 103, being a computer system having a bus for communicating information, and a signal processing unit coupled to said bus for processing a signal having a plurality of channels.	11. A computer system having a bus for communicating information, and a signal processing unit coupled to said bus for processing a signal having a plurality of channels, said signal processing unit comprising:	5,867,205, Claim 11 (part)
107. The apparatus of claim 103, being a communication network system, further comprising:	21. A communication network system comprising:	5,867,205, Claim 21
(a) a communication network interface to communicate in said communication network system;	(a) a communication network interface to communicate in said communication network system;	5,867,205, Claim 21
(b) a communication network server coupled to said communication network interface to receive a signal having a plurality of channels; said communication network server to generate a stream of decoded texts indicative of channel contents of said channels, responsive to said channels;	(b) a communication network server coupled to said communication network interface to receive a signal having a plurality of channels; said communication network server to generate a stream of decoded texts indicative of channel contents of said channels, responsive to said channels; and	5,867,205, Claim 21
said communication network server comprising:	22. The communication network system of claim 17 wherein said communication network server comprises:	5,867,205, Claim 22
(b.1) one or more tuners to tune to said channels; (b.2) one or more decoders coupled to	(b.1) one or more tuners to tune to said channels; (b.2) one or more decoders coupled to	5,867,205, Claim 22 5,867,205,
said one or more tuners to receive said	said one or more tuners to receive said	Claim 22

3459-11 - 30 -

1

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
channels, and to generate said decoded texts indicative of channel contents of said channels;	channels, and to generate said decoded texts indicative of channel contents of said channels;	
(b.3) one or more buffers coupled to said one or more tuners to temporarily store portions of the channel contents of said channels for a predetermined duration of time; and	(b.3) one or more buffers coupled to said one or more tuners to temporarily store portions of the channel contents of said channels for a predetermined duration of time; and	5,867,205, Claim 22
(b.4) a server interface coupled to said buffers and said decoders to couple said communication network server to said communication network interface; and	(b.4) a server interface coupled to said buffers and said decoders to couple said communication network server to said communication network interface.	5,867,205, Claim 22
(c) a client computer system coupled to said communication network interface to receive said channels and said decoded texts from said network server, encompassing said analyzing units and said arbitrating unit, to analyze said received decoded texts to determine if channel contents of said channels are among channel contents defined by selection data, and to arbitrate display and/or record resource contentions among analyzed channels with channel contents that are defined by the selection data,	(c) a client computer system coupled to said communication network interface to receive said channels and said decoded texts from said network server, to analyze said received decoded texts to determine if channel contents of said channels are among channel contents defined by selection data, and to arbitrate display and/or record resource contentions among analyzed channels with channel contents that are defined by the selection data.	5,867,205, Claim 21
said client computer system comprising:	23. The communication network system of claim 21 wherein said client computer system comprises:	5,867,205, Claim 23
(c.1) an analyzer coupled to said communication network interface to perform said analysis; and	(c.1) an analyzer coupled to said communication network interface to perform said analysis; and	5,867,205, Claim 23
(c.2) an arbitration unit coupled to said analyzer to perform said arbitration.	(c.2) an arbitration unit coupled to said analyzer to perform said arbitration.	5,867,205, Claim 23
108. A method of classifying a pattern, said method comprising the steps of: acquiring a signal, said signal including an input pattern to be classified; sampling the acquired signal to produce an intermediate pattern based on said signal;	1. A method of classifying a pattern, said method comprising the steps of: acquiring a signal, said signal including an input pattern to be classified; sampling the acquired signal to produce an intermediate pattern based on said signal;	5,867,118, Claim 1 5,867,118, Claim 1 5,867,118, Claim 1
performing a transform on at least a portion of said intermediate pattern, said transform being from the group consisting	performing a transform on at least a portion of said intermediate pattern, said transform being from the group	5,867,118, Claim 1

3459-11 - 31 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
of wavelet transforms and wavelet packet transforms, to produce a wavelet transformed pattern;	consisting of wavelet transforms and wavelet packet transforms, to produce a wavelet transformed pattern;	
selecting a reduced feature space from the	selecting a reduced feature space from	5,867,118,
wavelet transformed pattern; and classifying said input pattern on the basis	the wavelet transformed pattern; and classifying said input pattern on the basis	Claim 1 5,867,118,
of said reduced feature space.	of said reduced feature space.	Claim 1
109. The method as claimed in claim 108, wherein said step of classifying said pattern on the basis of said reduced feature space comprises the step of classifying a target on the basis of said selected reduced feature space.	10. A method as claimed in claim 1, wherein said step of classifying said pattern on the basis of said reduced feature space comprises the step of classifying a target on the basis of said selected reduced feature space.	5,867,118, Claim 10
110. An apparatus for performing the method of claim 104, comprising; means for acquiring a signal, said signal including an input pattern to be classified;	16. An apparatus for classifying a pattern, said apparatus comprising; means for acquiring a signal, said signal including an input pattern to be classified;	5,867,118, Claim 16 5,867,118, Claim 16
means for sampling the acquired signal to produce an intermediate pattern based on said signal;	means for sampling the acquired signal to produce an intermediate pattern based on said signal;	5,867,118, Claim 16
means for performing a transform on at least a portion of said intermediate pattern, said transform being from the group consisting of wavelet transforms and wavelet packet transforms to produce a wavelet transformed pattern;	means for performing a transform on at least a portion of said intermediate pattern, said transform being from the group consisting of wavelet transforms and wavelet packet transforms to produce a wavelet transformed pattern;	5,867,118, Claim 16
means for selecting a reduced feature space from the wavelet transformed pattern; and	means for selecting a reduced feature space from the wavelet transformed pattern; and	5,867,118, Claim 16
means for classifying said input pattern on the basis of said reduced feature space.	means for classifying said input pattern on the basis of said reduced feature space.	5,867,118, Claim 16
111. An apparatus as claimed in claim 110, wherein said means for performing a transform on at least a portion of the intermediate pattern comprises means for performing a wavelet transform on a selected subset of the intermediate pattern.	22. An apparatus as claimed in claim 16, wherein said means for performing a transform on at least a portion of the intermediate pattern comprises means for performing a wavelet transform on a selected subset of the intermediate pattern.	5,867,118, Claim 22

3459-11 - 32 -

APPLICATION CLAIM	PATENT CLAIM	CLAIM NO
112. An apparatus as claimed in claim 110, wherein said means for classifying said pattern on the basis of said reduced feature space comprises means for classifying a target on the basis of said selected reduced feature space.	25. An apparatus as claimed in claim 16, wherein said means for classifying said pattern on the basis of said reduced feature space comprises means for classifying a target on the basis of said selected reduced feature space.	5,867,118, Claim 25
113. An electronic programming guide operable to run on a computing platform that is associated with a television, the platform operable to access a program listing database containing program listing information for a plurality of television programs, the electronic programming guide comprising:	1. An electronic programming guide operable to run on a computing platform that is associated with a television, the platform operable to access a program listing database containing program listing information for a plurality of television programs, the electronic programming guide comprising:	6,163,118, Claim 1
a profile database operable to store a viewer profile; and a suggest module coupled to the profile database, the suggest module operable to access the viewer profile and the program listing information and, in response, to generate a preferred schedule according to the viewer profile and the program listing information, the preferred schedule operable to indicate the desirability of a particular program relative to other programs;	a profile database operable to store a viewer profile; and a suggest module coupled to the profile database, the suggest module operable to access the viewer profile and the program listing information and, in response, to generate a preferred schedule according to the viewer profile and the program listing information, the preferred schedule operable to indicate the desirability of a particular program relative to other programs;	6,163,118, Claim 1 6,163,118, Claim 1
the suggest module comprises a scoring algorithm operable to generate a preference score for the program according to the viewer profile and the program listing information;	the suggest module comprises a scoring algorithm operable to generate a preference score for the program according to the viewer profile and the program listing information;	6,163,118, Claim 1
the suggest module is further operable in response to viewer's requests for a channel change to select a channel for viewing according to the preference score for the program while bypassing channels that are not currently airing a program satisfying the preferences of the viewer in effect.	the suggest module is further operable in response to viewer's requests for a channel change to select a channel for viewing according to the preference score for the program while bypassing channels that are not currently airing a program satisfying the preferences of the viewer in effect.	6,163,118, Claim 1
114. A method performed on a computing platform that is associated with a television for providing functionality	2. A method performed on a computing platform that is associated with a television for providing functionality	6,163,118, Claim 2

3459-11 - 33 -

\*1

APPLICATION CLAIM	PATENT CLAIM	CLAIM
		NO
associated with an electronic	associated with an electronic	
programming guide, the method	programming guide, the method	
comprising:	comprising:	
storing a viewer profile in a profile	storing a viewer profile in a profile	6,163,118,
database;	database;	Claim 2
accessing the viewer profile in the profile	accessing the viewer profile in the profile	6,163,118,
database and program listing information	database and program listing information	Claim 2
stored in a program listing database for a	stored in a program listing database for a	
plurality of television programs;	plurality of television program;	
generating a preferred schedule in	generating a preferred schedule in	6,163,118,
accordance with the viewer profile and	accordance with the viewer profile and	Claim 2
the program listing information, the	the program listing information, the	
preferred schedule operable to indicate	preferred schedule operable to indicate	
the desirability of a particular program	the desirability of a particular program	
relative to other programs;	relative to other program;	
generating a preference score for the	generating a preference score for the	6,163,118,
program according to the viewer profile	program according to the viewer profile	Claim 2
and the program listing information; and	and the program listing information; and	
selecting a channel in response to viewer's	selecting a channel in response to	6,163,118,
request for channel change for viewing	viewer's request for channel change for	Claim 2
channels according to the preference	viewing channels according to the	
score for the program while bypassing	preference score for the program while	
channels that are not currently airing a	bypassing channels that are not currently	
program satisfying the preference of the	airing a program satisfying the	
viewer in effect.	preference of the viewer in effect.	

3459-11 - 34 -

## CLAIM CORRESPONDENCE CHART **ELECTED CLAIMS**

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
35. An apparatus, comprising:	Generic	5,724,567,
		Claim 1
means for storing a plurality of content		
records;		
means for accessing the content		
records;		
means for storing a persistent user-		
specific profile;		
means for relating content records with a stored user profile;		
means for presenting to the user the		
related content records;		
means for receiving a user feedback on		
said relation; and		
means for updating the user profile		
based on said the feedback.		
0.00		
36. The apparatus according to claim 35,		
wherein said apparatus is an information access system for automatically presenting users with information items of interest;	1. An information access system for automatically presenting users with information items of interest, comprising:	5,724,567, claim 1
wherein said content records storing means comprises a computer system containing a database of information items available to be presented to users of the system;	a computer system containing a database of information items available to be presented to users of the system;	
wherein said accessing means comprises at least one access device for enabling users to communicate with the computer system and access any of the items of available information;	items of available information;	
wherein said user profile storing means stores a user profile for each user having access to the available items of information;	means for storing a user profile for each user having access to the available items of information;	
wherein said relating means comprises means for ranking a likely degree of interest for each of the available items of information in accordance with a user profile;	means for raking the likely degree of interest for each of the available items of information in accordance with a user profile;	

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
wherein said presenting means presents the items of information to an access device in order of ranking and enabling a user to retrieve each item;	means for presenting the items of information to an access device in order of ranking and enabling a user to retrieve each item;	
wherein said feedback receiving means comprises means for enabling the user to indicate that user's interest in each retrieved item of information; and	means for enabling the user to indicate that user's interest in each retrieved item of information; and	
wherein said updating means comprises means for updating the user's profile in response to indications of interest provided by the user.	means for updating the user's profile in response to indications of interest provided by the user.	
37. The apparatus of claim 36, wherein said ranking means ranks the available items of information for a user on the basis of at least one attribute pertaining to each item of information.	2. The information access system of claim 1, wherein said ranking means ranks the available items of information for a user on the basis of at least one attribute pertaining to each item of information.	5,724,567, claim 2
38. The apparatus of claim 37, wherein said attribute is the contents of the item of information.	3. The information access system of claim 2, wherein said attribute is the contents of the item of information.	5,724,567, claim 3
39. The apparatus of claim 36, wherein said ranking means produces a formula which predicts the interest of a user in an item of information on the basis of at least one of a user profile and an attribute related to that item of information.	9. The information access system of claim 1, wherein said ranking means produces a formula which predicts the interest of a user in an item of information on the basis of at least one of a collection of votes of other users relating to that item of information, a user profile and an attribute related to that item of information.	5,724,567, claim 9
40. A method, comprising:	Generic	5,724,567, claim 23
storing a plurality of content records; storing a persistent user-specific profile;		
receiving a user request for content records;		
relating content records with a stored user profile; and		
presenting to the user the related content records.		

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
41. The method according to claim 40, for providing information to users of a computer system, wherein:	23. A method for providing information to users of a computer system, comprising the steps of:	5,724,567, claim 23
said content record storing step comprises storing items of information in an unstructured database within the computer system;	storing items of information in an unstructured database within the computer system;	
said user profile storing step comprises determining and storing user profiles for users of the computer system who have access to the items of information;	determining and storing user profiles for users of the computer system who have access to the items of information;	
said receiving a request step comprises receiving a request from a user for access to the stored information;	receiving a request from a user for access to the stored information;	
said relating step comprises determining a user's likely degree of interest in items of information stored in said database, in accordance with that user's profile, and ranking the items of information in accordance with their determined degrees of interest; and	determining the user's likely degree of interest in items of information stored in said database, in accordance with that user's profile, and ranking the items of information in accordance with their determined degrees of interest; and	
said presenting step comprises displaying the items of information with an indication of their relative rankings.	displaying the items of information with an indication of their relative rankings.	
42. The method of claim 41, wherein said items of information are displayed in order of their ranking.	24. The method of claim 23 wherein said items of information are displayed in order of their ranking.	5,724,567, claim 24
43. The method of claim 41, wherein the user profiles and the determined degree of interest in items of information are based upon at least one attribute associated with each item of information.	25. The method of claim 23 wherein the user profiles and the determined degree of interest in items of information are based upon at least one attribute associated with each item of information.	5,724,567, claim 25
44. The method of claim 43, wherein said attribute is the content of the item of information.	26. The method of claim 25 wherein said attribute is the content of the item of information.	5,724,567, claim 26
45. The method of claim 41, further including the steps of selecting an item of information from those which are	27. The method of claim 23 further including the steps of selecting an item of information from those which are	5,724,567, claim 27

•

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
displayed, providing an indication of	displayed, providing an indication of	
the user's actual interest in the selected	the user's actual interest in the selected	
item of information, and storing the	item of information, and storing the	
user's indicated interest.	user's indicated interest.	
46. The method of claim 41, wherein	33. The method of claim 23 wherein	5,724,567,
the likely degree of interest is	the likely degree of interest is	claim 33
determined for all of the items of	determined for all of the items of	
information stored in said database in	information stored in said database in	
response to receipt of a user's request	response to receipt of a user's request	
for access.	for access.	
47. A method, comprising the steps of:	Generic	5,754,939, Claim 1
automatically generating a user-specific		
profile representing an interest		
summary based on a history of access		
to objects; and		
persistently storing the user profile in		
memory.		
48. The method of claim 47, for	1. A method for providing a user with	5,754,939,
providing a user with access to selected	access to selected ones of a plurality of	Claim 1
ones of a plurality of target objects and	target objects and sets of target object	
sets of target object characteristics that	characteristics that are accessible via an	
are accessible via an electronic storage	electronic storage media, where said	
media, where said user is connected via	users are connected via user terminals	
user terminals and data communication	and data communication connections to	
connections to a target server system	a target server system which accesses	
which accesses said electronic storage	said electronic storage media, said	
media, wherein:	method comprising the steps of:	
said automatically generating step	automatically generating at least one	
generates at least one user target profile	user target profile interest summary for	
interest summary for a user at a user	a user at a user terminal, each of said	
terminal, each of said user target profile	user target profile interest summary	
interest summary being indicative of	being indicative of ones of said target	
ones of said target objects and sets of	objects and sets of target object	
target object characteristics accessed by	characteristics accessed by said user;	
said user; and	and	
said storing step stores said at least one	storing said at least one user target	
user target profile interest summary in a	profile interest summary in a memory.	
memory.		
49. The method of claim 48, further		5,754,939
comprising the steps of:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

(1)

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
enabling said user to access said	2. The method of claim 1 further	5,754,939,
plurality of target objects and sets of	comprising the step of: enabling said	Claim 2
target object characteristics stored on	user to access said plurality of target	
said electronic storage media via said	objects and sets of target object	
user target profile interest summaries;	characteristics stored on said electronic	
,	storage media via said user target	
	profile interest summaries.	
said step of enabling access	3. The method of claim 2 wherein said	5,754,939,
comprising:	step of enabling access comprises:	Claim 3
correlating said user target profile	correlating said user target profile	5,754,939,
interest summaries, generated for said	interest summaries, generated for said	Claim 3
user, with target profiles generated for	user, with target profiles generated for	
said plurality of target objects and sets	said plurality of target objects and sets	
of target object characteristics to	of target object characteristics to	
identify ones of said plurality of target	identify ones of said plurality of target	
objects and sets of target object	objects and sets of target object	
characteristics stored on said electronic	characteristics stored on said electronic	
storage media that are likely to be of	storage media that are likely to be of	
interest to said user;	interest to said user.	
transmitting a list, that identifies at least	4. The method of claim 3 wherein said	5,754,939,
one of said identified ones of said	step of enabling access further	Claim 4
plurality of target objects and sets of	comprises: transmitting a list, that	
target object characteristics, to said	identifies at least one of said identified	
user; and	ones of said plurality of target objects	
	and sets of target object characteristics,	
	to said user; and	
providing access to a selected one of	providing access to a selected one of	5,754,939,
said plurality of target objects and sets	said plurality of target objects and sets	Claim 4
of target object characteristics stored on	of target object characteristics stored on	
said electronic storage media in	said electronic storage media in	
response to said user selecting an item	response to said user selecting an item	
from said list;	from said list.	
said step of providing access further	5. The method of claim 4 wherein said	5,754,939,
comprising:	step of providing access comprises:	Claim 5
transmitting data, in response to said	transmitting data, in response to said	5,754,939,
user activating said user terminal to	user activating said user terminal to	Claim 5
identify said selected item on said list,	identify said selected item on said list,	
indicative of said user's selection of	indicative of said user's selection of	
said selected item from said user	said selected item from said user	
terminal to said target server via a one	terminal to said target server via a one	
of said data communication	of said data communication	
connections;	connections.	
retrieving, in response to receipt of said	6. The method of claim 5 wherein said	5,754,939,
data from said user terminal, a one of a	step of providing access further	Claim 6
target object and set of target object	comprises: retrieving, in response to	

37

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
characteristics identified by said	receipt of said data from said user	
selected item from said electronic	terminal, a one of a target object and	
storage media; and	set of target object characteristics	
	identified by said selected item from	
	said electronic storage media; and	
transmitting said retrieved one of said	transmitting said retrieved one of said	5,754,939,
target object and set of target object	target object and set of target object	Claim 6
characteristics to said user terminal for	characteristics to said user terminal for	
display thereon to said user,	display thereon to said user.	
said step of automatically generating	7. The method of claim 1 wherein said	5,754,939,
comprising:	step of automatically generating	Claim 7
F &	comprises:	
automatically updating said user target	automatically updating said user target	5,754,939,
profile interest summary for said user	profile interest summary for said user	Claim 7
as a function of said target objects and	as a function of said target objects and	
sets of target object characteristics	sets of target object characteristics	
retrieved by said user.	retrieved by said user.	
Terrieved by Sara aser.	Tetrieved by bard abor.	
50. The method of claim 48, wherein	17. A method of scheduling customer	5,758,257,
said automatically generating step	access to data from a plurality of data	Claim 17
comprises:	sources, comprising the steps of:	(see also
comprises.	sources, comprising the steps of	claims 1
		and 18)
creating a customer profile, said	creating at least one customer profile	5,758,257,
customer profile indicating a respective	for each eligible recipient of said data,	Claim 17
customer's preferences for data;	said customer profile indicating the	
customer's preferences for data,	customer's preferences for data having	
	predetermined characteristics;	
	creating content profiles for each data	5,758,257,
	source of said data, said content	Claim 17
	•	Ciaiii 17
	profiles indicating the degree of content	
	of said predetermined characteristics in data from each data source;	
'4 '		5 759 257
monitoring a history of data objects	monitoring which data sources are	5,758,257,
accessed by the customer; and	actually accessed by each recipient; and	Claim 17
automatically updating the customer	updating, without input from each	5,758,257,
profile in accordance with the content	customer, each customer profile in	Claim 17
profiles accessed by the customer to	accordance with the content profiles of	
automatically update the customer	the data sources actually accessed by	
profile to represent the customer's	that customer to automatically update	
preferences.	each customer's actual preferences for	
	said predetermined characteristics.	
	17 1 1 2 1 1 1	5.754.000
51. The method of claim 47, wherein	17. A method of scheduling customer	5,754,939,
said method is for scheduling customer	access to data from a plurality of data	Claim 17

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
access to data from a plurality of data	sources, comprising the steps of:	
sources,		
further comprising the steps of:		-
creating content profiles for each data	creating content profiles for each data	5,758,257,
source of said data, said content	source of said data, said content	Claim 17
profiles indicating a degree of content	profiles indicating the degree of content	
of predetermined characteristics in data	of said predetermined characteristics in	
from each data source;	data from each data source;	
said generating step comprises creating	creating at least one customer profile	5,758,257,
at least one customer profile for each	for each eligible recipient of said data,	Claim 17
eligible recipient of said data, said	said customer profile indicating the	
customer profile indicating a customer's	customer's preferences for data having	
preferences for data having	predetermined characteristics;	
predetermined characteristics;		
monitoring which data sources are	monitoring which data sources are	5,758,257,
actually accessed by each recipient; and	actually accessed by each recipient; and	Claim 17
updating, without input from each	updating, without input from each	5,758,257,
customer, each customer profile in	customer, each customer profile in	Claim 17
accordance with the content profiles of	accordance with the content profiles of	
the data sources actually accessed by	the data sources actually accessed by	
that customer to automatically update	that customer to automatically update	
each customer's actual preferences for	each customer's actual preferences for	
said predetermined characteristics.	said predetermined characteristics.	
50 777	10. 4. 1. 1. 6. 1. 1.1.	5.754.000
52. The method of claim 47, wherein	18. A method of scheduling customer	5,754,939,
said method is for scheduling customer	access to video programs, comprising	Claim 18
access to video programs,	the steps of:	
further comprising the steps of:	C1 C 1 1	5.754.020
creating content profiles for each video	creating content profiles for each video	5,754,939,
program available for viewing, said	program available for viewing, said	Claim 18
content profiles indicating a degree of	content profiles indicating the degree of	
content of predetermined characteristics	content of said predetermined	
in each video program;	characteristics in each video program;	5.754.020
creating at least one customer profile	creating at least one customer profile	5,754,939,
for each customer of said video	for each customer of said video	Claim 18
programs, said customer profile	programs, said customer profile	
indicating a customer's preferences for	indicating the customer's preferences	
predetermined characteristics of the video programs;	for predetermined characteristics of the video programs;	
monitoring which video programs are	monitoring which video programs are	5,754,939,
actually viewed by each customer; and	actually viewed by each customer; and	5,754,939, Claim 18
updating, without input from each	updating, without input from each	5,754,939,
customer, each customer profile in	customer, each customer profile in	Claim 18
accordance with the content profiles of	accordance with the content profiles of	
the video programs actually viewed by	the video programs actually viewed by	
the video programs actually viewed by	the video programs actually viewed by	

ψħ)

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
that customer to automatically update	that customer to automatically update	
each customer's actual preferences for	each customer's actual preferences for	
said predetermined characteristics.	said predetermined characteristics.	
53. The method of claim 52,	21. A method as in claim 18,	5,754,939,
comprising the further steps of	comprising the further steps of	Claim 21
receiving customer identity information	receiving customer identity information	
and determining from said customer	and determining from said customer	
identity information which customer	identity information which customer	
profile to update in said updating step.	profile to update in said updating step.	
54. The method of claim 47, wherein	41. A method of scheduling customer	5,754,939,
said method is for scheduling customer	access to data from a plurality of data	Claim 41
access to data from a plurality of data	sources, comprising the steps of:	
sources, further comprising the steps		
of:		
creating a customer profile for each	creating a customer profile for each	5,754,939,
customer of said plurality of data	customer of said plurality of data	Claim 41
sources, said customer profile	sources, said customer profile	
indicating a customer's preferences for	indicating said customer's preferences	
predetermined characteristics of the	for predetermined characteristics of the	
data sources;	data sources;	
monitoring which data sources are	monitoring which data sources are	5,754,939,
actually accessed by each customer;	actually accessed by each customer;	Claim 41
and	and	
updating each customer profile to	updating each customer profile to	5,754,939,
reflect a frequency of selection of the	reflect the frequency of selection of the	Claim 41
data sources by customers with	data sources by customers with	
customer profiles substantially similar	customer profiles substantially similar	
to said each customer profile.	to said each customer profile.	
55. An apparatus, comprising:	12. Apparatus for providing a user with	5,754,939,
	access to selected ones of a plurality of	Claim 12
	target objects and sets of target object	
	characteristics that are accessible via an	
	electronic storage media, where said	
	users are connected via user terminals	
	and data communication connections to	
	a target server system which accesses	
	said electronic storage media,	
	comprising:	
means for automatically generating a	means for automatically generating at	5,754,939,
user-specific profile representing an	least one user target profile interest	Claim 12
interest summary based on a history of	summary for a user at a user terminal,	
access to objects; and	each of said user target profile interest	

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
	summaries being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and	
a memory for persistently storing the user profile.	means for storing said at least one user target profile interest summary in a memory.	5,754,939, Claim 12
56. The apparatus according to claim 55, for providing a user with access to selected ones of a plurality of target objects and sets of target object characteristics that are accessible via an electronic storage media, where said user is connected via user terminals and data communication connections to a target server system which accesses said electronic storage media, comprising:	12. Apparatus for providing a user with access to selected ones of a plurality of target objects and sets of target object characteristics that are accessible via an electronic storage media, where said users are connected via user terminals and data communication connections to a target server system which accesses said electronic storage media, comprising:	5,754,939, Claim 12
means for automatically generating at least one user target profile interest summary for a user at a user terminal, each of said user target profile interest summaries being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and	means for automatically generating at least one user target profile interest summary for a user at a user terminal, each of said user target profile interest summaries being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and	5,754,939, Claim 12
means for storing said at least one user target profile interest summary in a memory.	means for storing said at least one user target profile interest summary in a memory.	5,754,939, Claim 12
57. The apparatus of claim 56, further comprising:		
means for enabling said user to access said plurality of target objects and sets of target object characteristics stored on said electronic storage media via said user target profile interest summaries;	13. The apparatus of claim 12 further comprising: means for enabling said user to access said plurality of target objects and sets of target object characteristics stored on said electronic storage media via said user target profile interest summaries.	5,754,939, Claim 13
said means for enabling access comprising:	14. The apparatus of claim 13 wherein said means for enabling access comprises:	5,754,939, Claim 14
means for correlating said user target profile interest summaries, generated	means for correlating said user target profile interest summaries, generated	5,754,939, Claim 14

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
for said user, with target profiles	for said user, with target profiles	
generated for said plurality of target	generated for said plurality of target	
objects and sets of target object	objects and sets of target object	
characteristics to identify ones of said	characteristics to identify ones of said	
plurality of target objects and sets of	plurality of target objects and sets of	
target object characteristics stored on	target object characteristics stored on	
said electronic storage media that are	said electronic storage media that are	
likely to be of interest to said user;	likely to be of interest to said user.	
means for transmitting a list, that	15. The apparatus of claim 14 wherein	5,754,939,
identifies at least one of said identified	said means for enabling access further	Claim 15
ones of said plurality of target objects	comprises: means for transmitting a	
and sets of target object characteristics,	list, that identifies at least one of said	
to said user; and	identified ones of said plurality of	
	target objects and sets of target object	
	characteristics, to said user; and	
means for providing access to a	means for providing access to a	5,754,939,
selected one of said plurality of target	selected one of said plurality of target	Claim 15
objects and sets of target object	objects and sets of target object	
characteristics stored on said electronic	characteristics stored on said electronic	
storage media in response to said user	storage media in response to said user	
selecting an item from said list.	selecting an item from said list.	
said means for providing access	16. The apparatus of claim 15 wherein	5,754,939,
comprising:	said means for providing access	Claim 16
	comprises:	
means for transmitting data, in response	means for transmitting data, in	5,754,939,
to said user activating said user	response to said user activating said	Claim 16
terminal to identify said selected item	user terminal to identify said selected	
on said list, indicative of said user's	item on said list, indicative of said	
selection of said selected item from	user's selection of said selected item	
said user terminal to said target server	from said user terminal to said target	
via a one of said data communication	server via a one of said data	
connections;	communication connections.	
means for retrieving, in response to	17. The apparatus of claim 16 wherein	5,754,939,
receipt of said data from said user	said means for providing access further	Claim 17
terminal, a target object identified by	comprises: means for retrieving, in	
said selected item from said electronic	response to receipt of said data from	
storage media; and	said user terminal, a target object	
	identified by said selected item from	
	said electronic storage media; and	5.554.000
means for transmitting said retrieved	means for transmitting said retrieved	5,754,939,
target object to said user terminal for	target object to said user terminal for	Claim 17
display thereon to said user;	display thereon to said user.	7.77.000
said means for automatically generating	18. The apparatus of claim 12 wherein	5,754,939,
comprising:	said means for automatically	Claim 18
	generating comprises:	

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
means for automatically updating said	means for automatically updating said	5,754,939,
user target profile interest summary for	user target profile interest summary for	Claim 18
said user as a function of said target	said user as a function of said target	
objects and sets of target object	objects and sets of target object	
characteristics retrieved by said user.	characteristics retrieved by said user.	
58. A system, comprising:	12. Apparatus for providing a user with access to selected ones of a plurality of target objects and sets of target object characteristics that are accessible via an electronic storage media, where said users are connected via user terminals and data communication connections to a target server system which accesses said electronic storage media, comprising:	5,754,939, claim 12
a persistent customer profile, said customer profile indicating a respective customer's preferences for data;	means for storing said at least one user target profile interest summary in a memory.	5,754,939, Claim 12
means for monitoring a history of data	means for automatically generating at	5,754,939,
objects accessed by the customer; and	least one user target profile interest summary for a user at a user terminal, each of said user target profile interest summaries being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and	Claim 12
means for automatically updating the customer profile in accordance with content profiles accessed by the customer to automatically update the customer profile to represent the customer's preferences.	18. The apparatus of claim 12 wherein said means for automatically generating comprises: means for automatically updating said user target profile interest summary for said user as a function of said target objects and sets of target object characteristics retrieved by said user.	5,754,939, Claim 18
59. The system according to claim 58, for scheduling customer access to data from a plurality of data sources, further comprising:	62. A system for scheduling customer access to data from a plurality of data sources, comprising:	5,758,257, Claim 62
content profiles for each data source of said data, said content profiles indicating a degree of content of predetermined characteristics in data from each data source;	content profiles for each data source of said data, said content profiles indicating the degree of content of said predetermined characteristics in data from each data source;	5,758,257, Claim 62

8.

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
wherein:		
at least one customer profile for each eligible recipient of said data is provided, said customer profile indicating the customer's preferences for data having predetermined characteristics;	at least one customer profile for each eligible recipient of said data, said customer profile indicating the customer's preferences for data having predetermined characteristics;	5,758,257, Claim 62
said monitoring means monitors which data sources are actually accessed by each recipient; and	means for monitoring which data sources are actually accessed by each recipient; and	5,758,257, Claim 62
said updating means updates, without input from each customer, each customer profile in accordance with the content profiles of the data sources actually accessed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.	means for updating, without input from each customer, each customer profile in accordance with the content profiles of the data sources actually accessed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.	5,758,257, Claim 62
60. The system according to claim 58, for scheduling customer access to video programs received from a video head end, further comprising:	63. A system for scheduling customer access to video programs received from a video head end, comprising:	5,758,257, Claim 63
content profiles for each video program available for viewing, said content profiles indicating a degree of content for predetermined characteristics in each video program;	content profiles for each video program available for viewing, said content profiles indicating the degree of content of said predetermined characteristics in each video program;	5,758,257, Claim 63
wherein: at least one customer profile for each customer of said video programs is provided, said customer profile indicating the customer's preferences for predetermined characteristics of the video programs;	at least one customer profile for each customer of said video programs, said customer profile indicating the customer's preferences for predetermined characteristics of the video programs;	5,758,257, Claim 63
said means for monitoring monitors which video programs are actually viewed by each customer; and	means for monitoring which video programs are actually viewed by each customer; and	5,758,257, Claim 63
said means for updating updates, without input from each customer, each customer profile in accordance with the content profiles of the video programs actually viewed by that customer to automatically update each customer's actual preferences for said	means for updating, without input from each customer, each customer profile in accordance with the content profiles of the video programs actually viewed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.	5,758,257, Claim 63

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
predetermined characteristics.		
61. The system as in claim 60, further	66. A system as in claim 63, further	5,758,257,
comprising:	comprising	Claim 66
means for transmitting said content	means for transmitting said content	5,758,257,
profiles to each customer along with	profiles to each customer along with	Claim 66
electronic program guide data for	electronic program guide data for	
upcoming television viewing periods.	upcoming television viewing periods.	
62. The system as in claim 60, further	67. A system as in claim 63, further	5,758,257,
comprising means for inputting	comprising means for inputting	Claim 67
customer identity information and for	customer identity information and for	
determining from said customer	determining from said customer	
identity information which customer	identity information which customer	
profile to update with said updating	profile to update with said updating	
means.	means.	
63. The system according to claim 60,	89. A system for scheduling customer	5,758,257,
for scheduling customer access to data	access to data provided by a plurality of	Claim 89
provided by a plurality of data sources,	data sources, comprising:	
further comprising:	!	!
means for creating a customer profile	means for creating a customer profile	5,758,257,
for each customer of said plurality of	for each customer of said plurality of	Claim 89
data sources, said customer profile	data sources, said customer profile	
indicating said customer's preferences	indicating said customer's preferences	
for predetermined characteristics of the	for predetermined characteristics of the	
data sources;	data sources;	
said monitoring means monitors which	means for monitoring which data	5,758,257,
data sources are actually accessed by	sources are actually accessed by each	Claim 89
each customer; and	customer; and	
said updating means updates each	means for updating each customer	5,758,257,
customer profile to reflect a frequency	profile to reflect the frequency of	Claim 89
of selection of the data sources by	selection of the data sources by	
customers with customer profiles	customers with customer profiles	
substantially similar to said each	substantially similar to said each	
customer profile.	customer profile.	
(4 T)	01 A 1/2	5.750.057
64. The system according to claim 58,	91. A multimedia terminal for	5,758,257,
being a multimedia terminal for	receiving data from a plurality of data	Claim 91
receiving data from a plurality of data	sources, comprising:	
sources, further comprising:		5 750 257
means for storing at least one customer	means for storing at least one customer	5,758,257,
profile indicating a customer's	profile indicating a customer's	Claim 91
preferences for data having	preferences for data having	
predetermined characteristics;	predetermined characteristics;	

APPLICATION CLAIMS	PATENT CLAIMS	CLAIM NO
means for storing content profiles for	means for storing content profiles for	5,758,257,
each data source of said data, said	each data source of said data, said	Claim 91
content profiles indicating a degree of	content profiles indicating the degree of	
content of said predetermined	content of said predetermined	
characteristics in data from each data	characteristics in data from each data	
source;	source;	
means for inputting recipient identity	means for inputting recipient identity	5,758,257,
information;	information;	Claim 91
means for selecting different customer	means for selecting different customer	5,758,257,
profiles which correspond to said	profiles which correspond to said	Claim 91
recipient identity information in	recipient identity information in	
accordance with the time of day and	accordance with the time of day and	
day of the week;	day of the week;	
processing means for relating said	processing means for relating said	5,758,257,
selected customer profiles with the	selected customer profiles with the	Claim 91
content profiles for the data available	content profiles for the data available	
from each data source to the customer	from each data source to the customer	
at a particular time and for determining	at a particular time and for determining	
a subset of data having content profiles	a subset of data having content profiles	
which most closely match said selected	which most closely match said selected	
customer profile; and	customer profile; and	
a display guide for presenting said	a display guide for presenting said	5,758,257,
subset of data to said customer for	subset of data to said customer for	Claim 91
selection.	selection.	
67.00		5 5 5 5 5 5
65. The system as in claim 64, further	93. A multimedia terminal as in claim	5,758,257,
comprising means for storing an	91, further comprising means for	Claim 93
electronic program guide, wherein said	storing an electronic program guide,	
display guide highlights programs	wherein said display guide highlights	
within said electronic program guide	programs within said electronic	
which correspond to said subset of data.	program guide which correspond to	
	said subset of data.	